

# Belzona knows how to rebuild a diaphragm pump

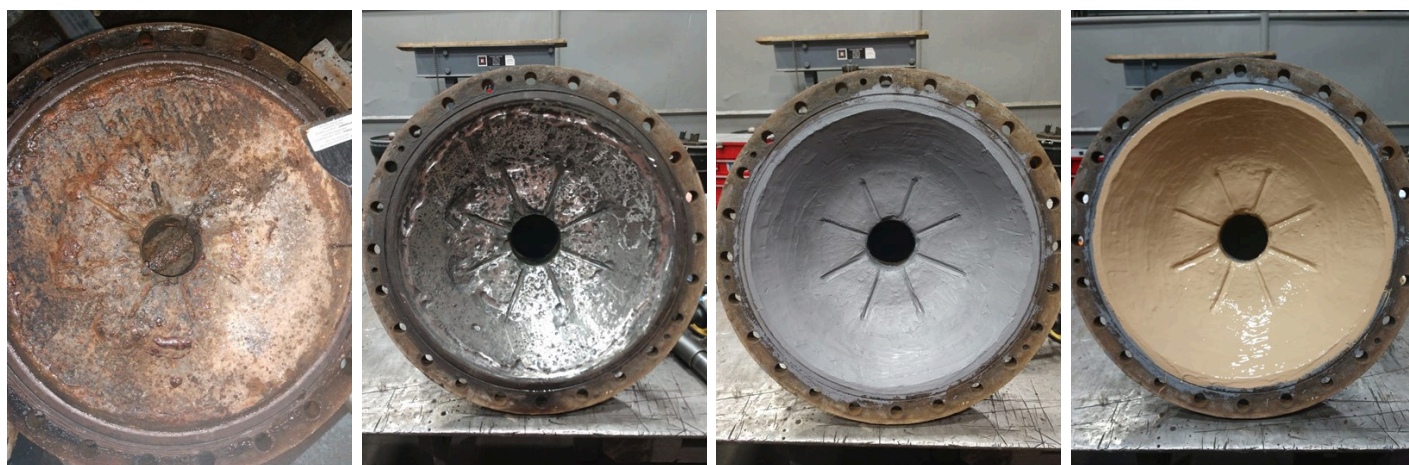
ID: 8135

Industry: Fluid Flow  
Application: CEP-Centrifugal Pumps  
Substrate: Cast steel  
Products: \* Belzona 1111 (Super Metal) ,  
\* Belzona 5831 (ST Barrier) ,

Customer Location: Eastern Washington  
Application Date: November 2019

## Problem

*This 30" diaphragm pump was not performing as it should, so Belzona was asked to rebuild it. The pump was originally installed in the 1960's and has been operating pretty much full time since. Once opened, the cause of the lack of performance was revealed as there was quite a bit of erosion and metal loss.*



## Photograph Descriptions

- \* 1. The pump opened. ,
- \* 2. The pump cleaned. ,
- \* 3. The pump rebuilt with Belzona 1111. ,
- \* 4. The pump coated with Belzona 5831 ,

## Application Situation

Potato processing plant.

## Application Method

Due to the location and timing, we were only able to do hand tool prep. The customer was made aware that the proper method would be to grit blast. Every effort was made to remove all contaminants and corrosion using a needle gun to clean, and a grinder to roughen the surface. 2 kg of Belzona 1111 Super Metal was mixed in several batches and applied to fill the pitting and wear, and to rebuild the edge. Most areas were up to 3/4" deep, and the outer edge averaged 3/4" deep by 1.5" wide in metal loss. 2 coats of Belzona 5831 ST Barrier was then applied by hand and allowed to cure.

For more examples of Belzona Know - How In Action, please visit <https://khia.belzona.com>

ISO 9001:2015  
FS 695214  
ISO 14001:2015  
EMS 695213

Belzona products are  
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## Belzona Facts

The actual amount of material applied to rebuild this diaphragm pump was under \$700.00 US. The cost to replace the pump is unknown as they are no longer available, and that would require reworking the process line as well as the cost of the pump. The entire application was completed in one day, on-site, using the customers own manpower which shows the ease of use when it comes to Belzona materials. The customer is already looking forward to and planning on rebuilding and coating several older pumps, and coating several new pumps as a preventative measure.

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